NOAA Climate Science and Services
Monthly Climate Update

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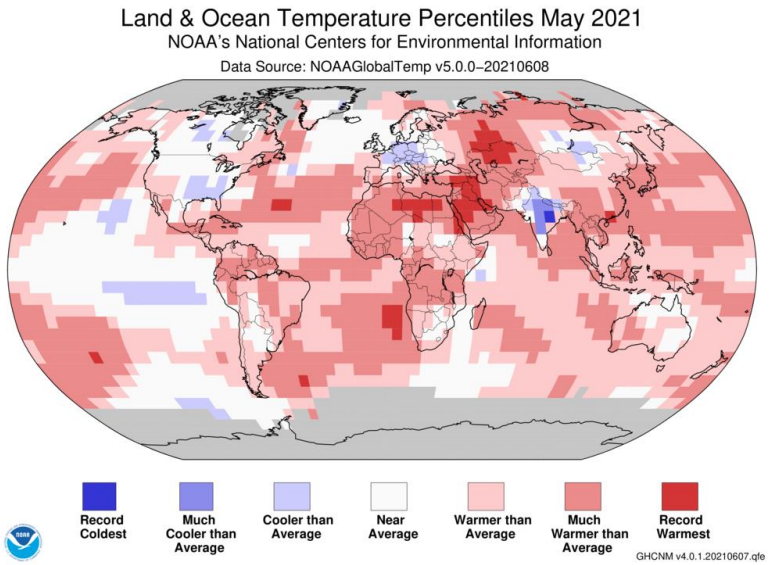
June 2021

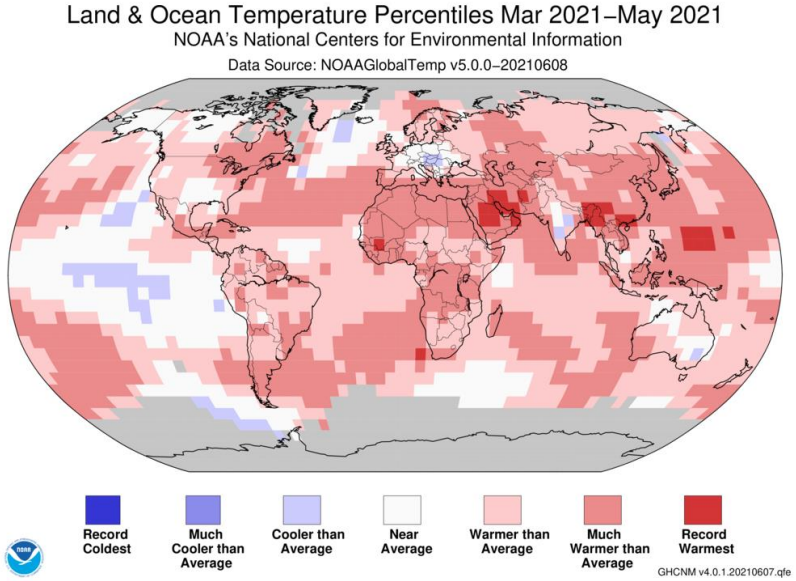
Global Temperature

The global temperature record dates back to 1880 (142 years)



May 2021

- **Global Land & Ocean:** +0.81°C / +1.46°F; tied with 2018 as the 6th warmest May on record.
- **Global Land:** +1.27°C / +2.29°F; 6th warmest May on record.
- **Global Ocean:** +0.63°C / +1.13°F; 8th warmest May on record.



March-May 2021

- **Global Land & Ocean:** +0.82°C / +1.48°F; 8th warmest Mar-May on record.
- **Global Land:** +1.37°C / +2.47°F; 8th warmest Mar-May on record.
- **Global Ocean:** +0.61°C / +1.10°F; 8th warmest Mar-May on record.

Global Temperature

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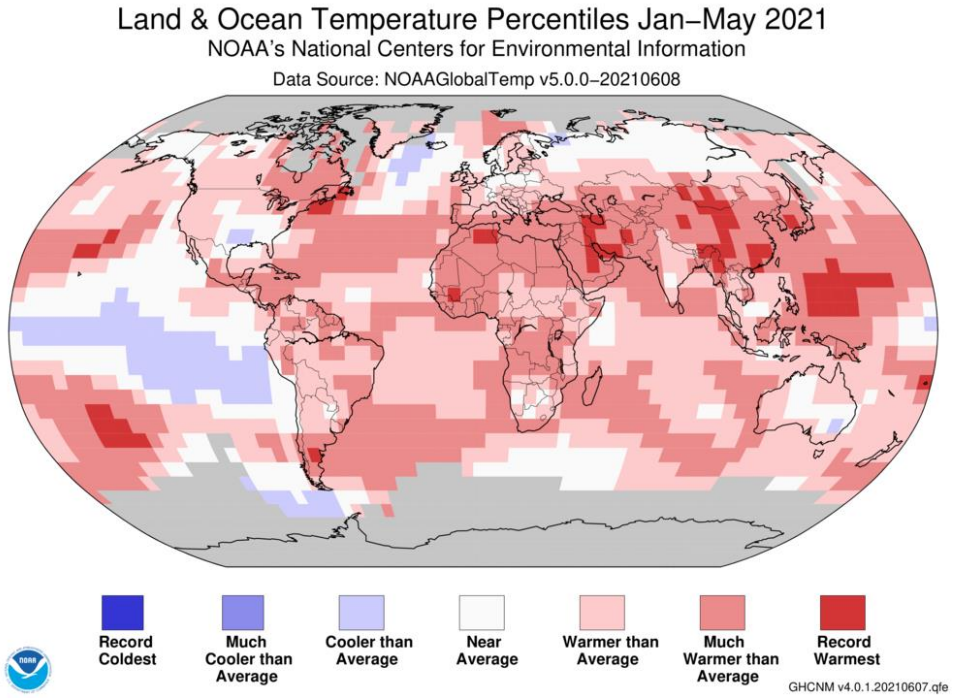
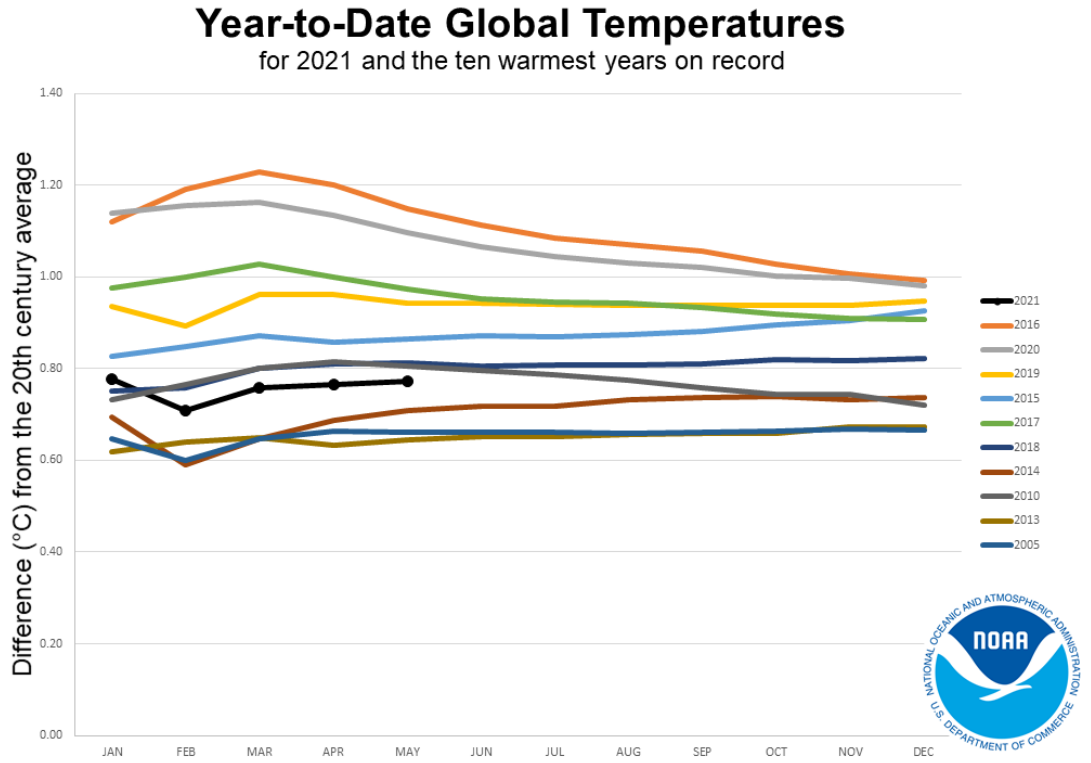


- **Global Land & Ocean:** +0.77°C / +1.39°F; 8th warmest January-May on record.



2021 Probability Ranking Outlook

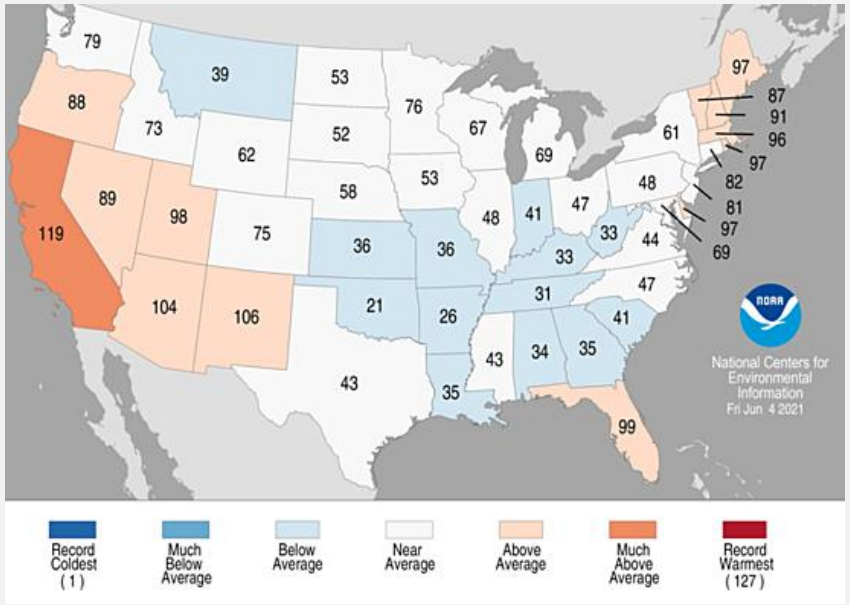
- <2% chance of a top 5 year
- Virtually certain that 2021 will be a top 10 year

Contiguous U.S. May 2021

Temperature: 60.4°F, +0.2°F, “near average”

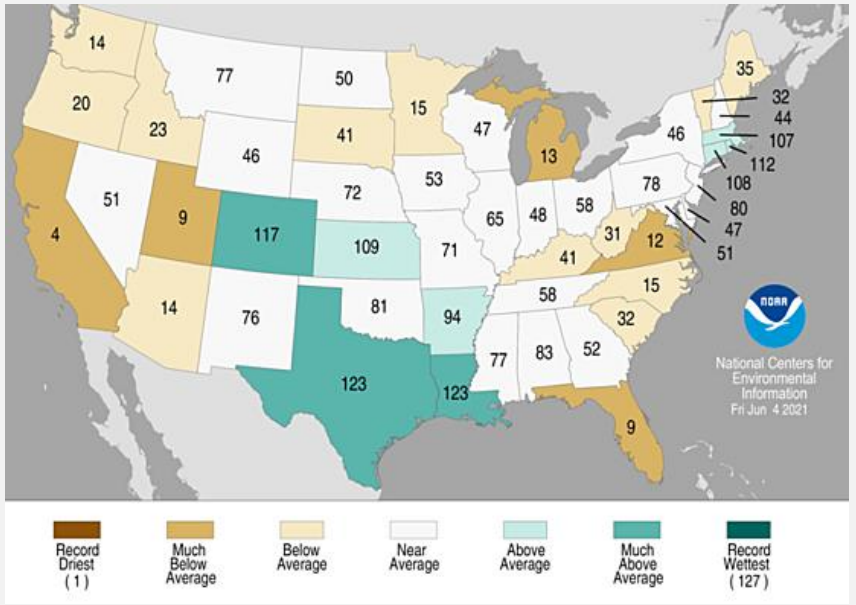
Precipitation: 2.94”, +0.03”, “near average”

Temperature Percentiles May 2021
Period: 1895-2021 (127 years)



- Above-average temperatures across the West, Southwest, New England, and Florida.
- Below-average temperatures across parts of the northern Rockies, central and southern Plains, central Gulf Coast, Southeast, and into the Ohio Valley.
- California had its ninth warmest May on record.

Precipitation Percentiles May 2021
Period: 1895-2021 (127 years)



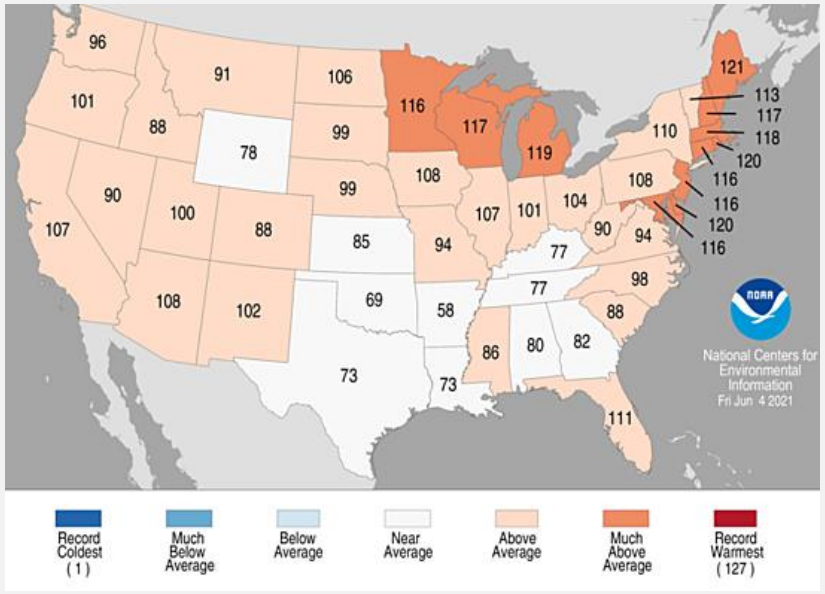
- Above-average precipitation from the central and western Gulf Coast into portions of the central Plains and scattered across part of the northern Rockies and southern New England.
- Drier-than-average conditions observed across the West, northern Plains, Southeast, and Great Lakes.

Contiguous U.S. Mar-May 2021

Temperature: 52.6°F, +1.7°F, 21st warmest spring on record

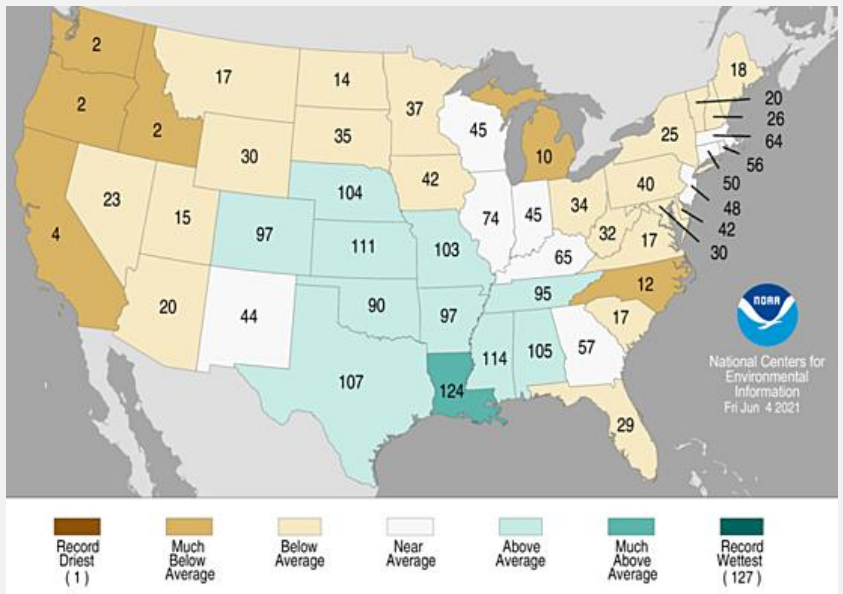
Precipitation: 7.53”, -0.41”, driest spring since 2006

Temperature Percentiles Mar-May 2021
Period: 1895-2021 (127 years)



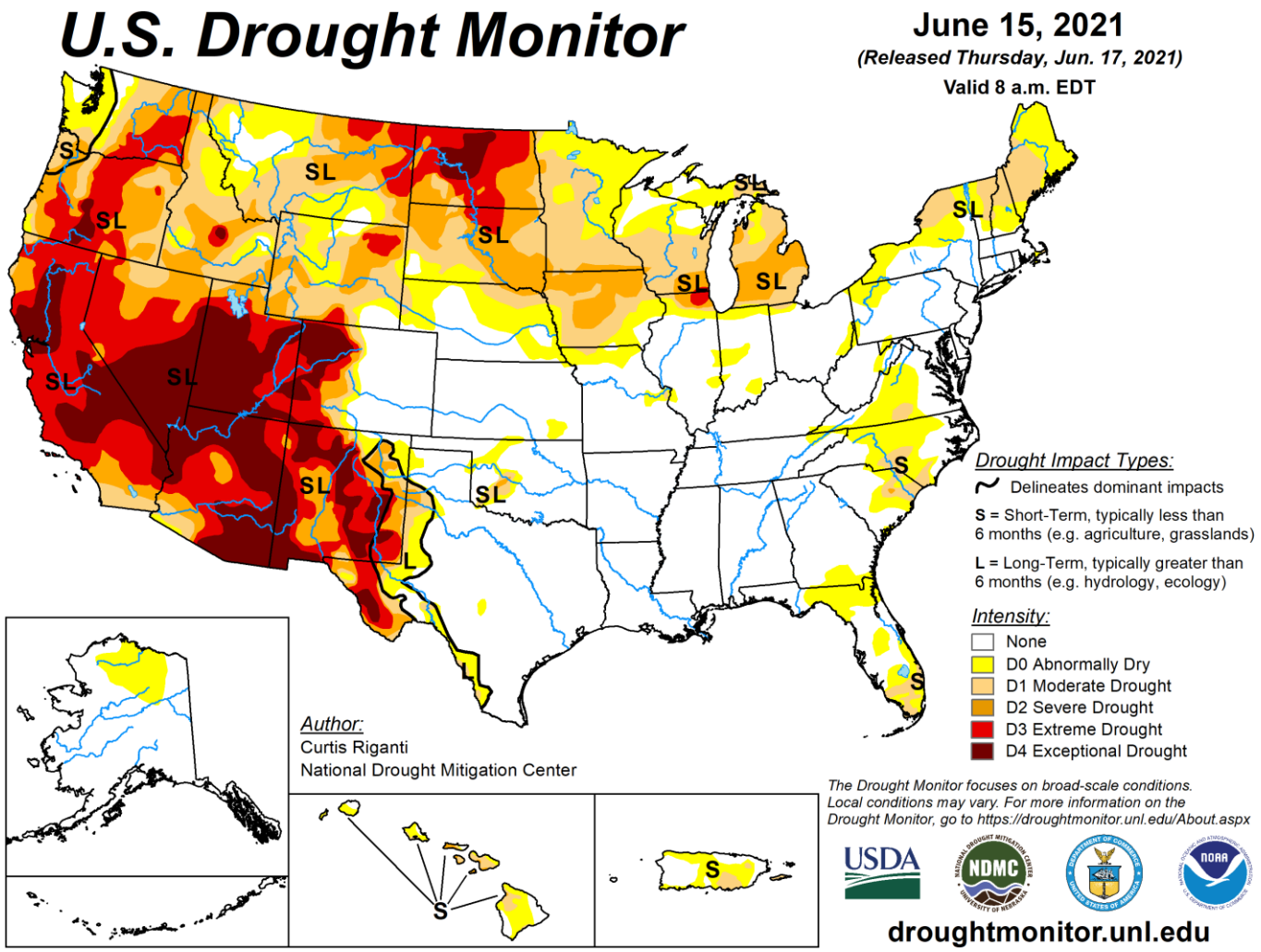
- Above-average temperatures much of the contiguous U.S. No state had a below-average statewide temperature.
- Five states across the Great Lakes and the Northeast had a top 10 warm spring.

Precipitation Percentiles Mar-May 2021
Period: 1895-2021 (127 years)



- Above-average precipitation from the central High Plains to the Mississippi River and south to the Gulf of Mexico.
- Drier-than-average conditions observed across much of the West, northern Plains, Great Lakes, and East Coast.

Current U.S. Drought



46% of Contiguous U.S. in Drought

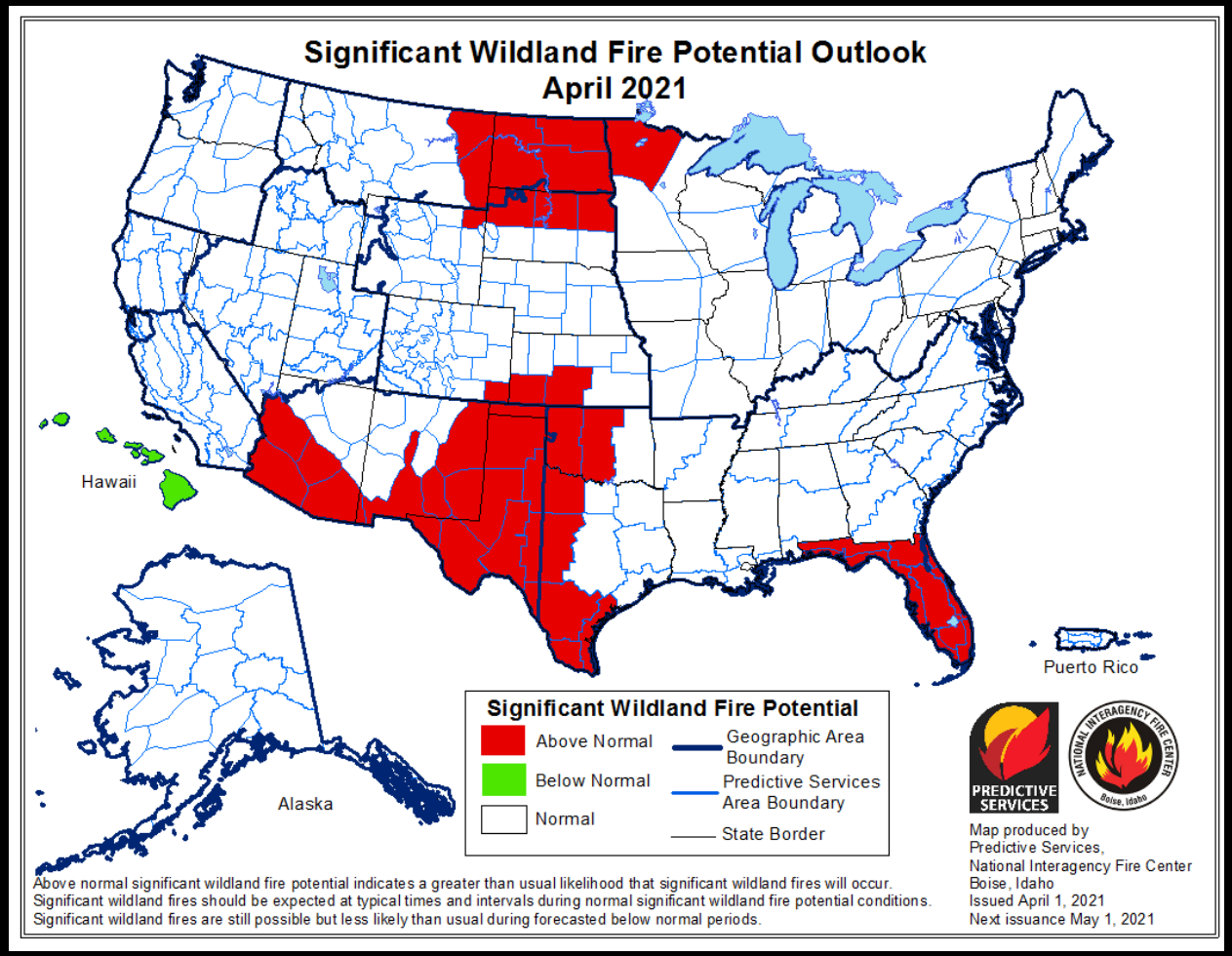
(↑2 percentage points since mid May)

2021 Summer Fire Season Outlook

Predictive Services

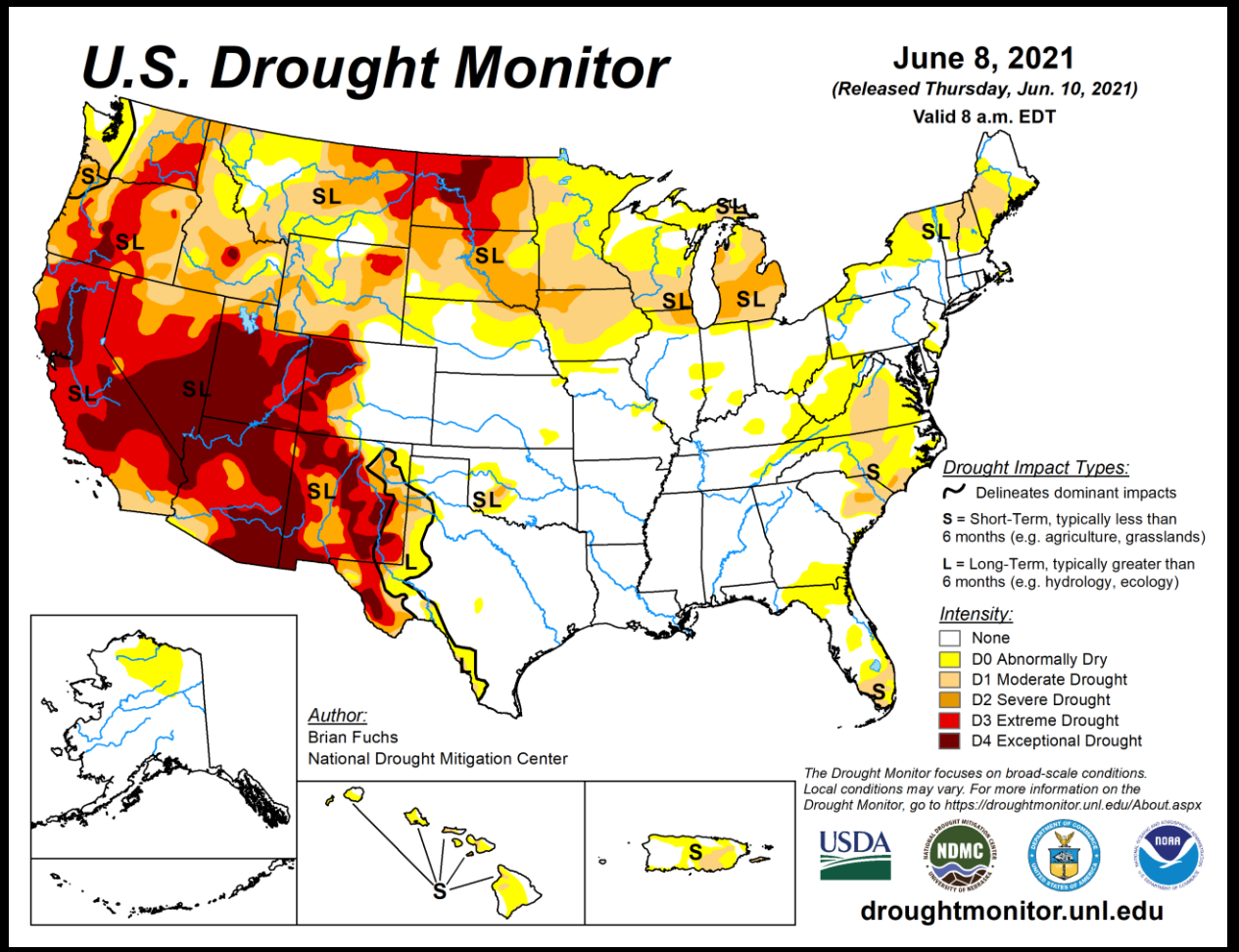
National Significant Fire Potential Outlook

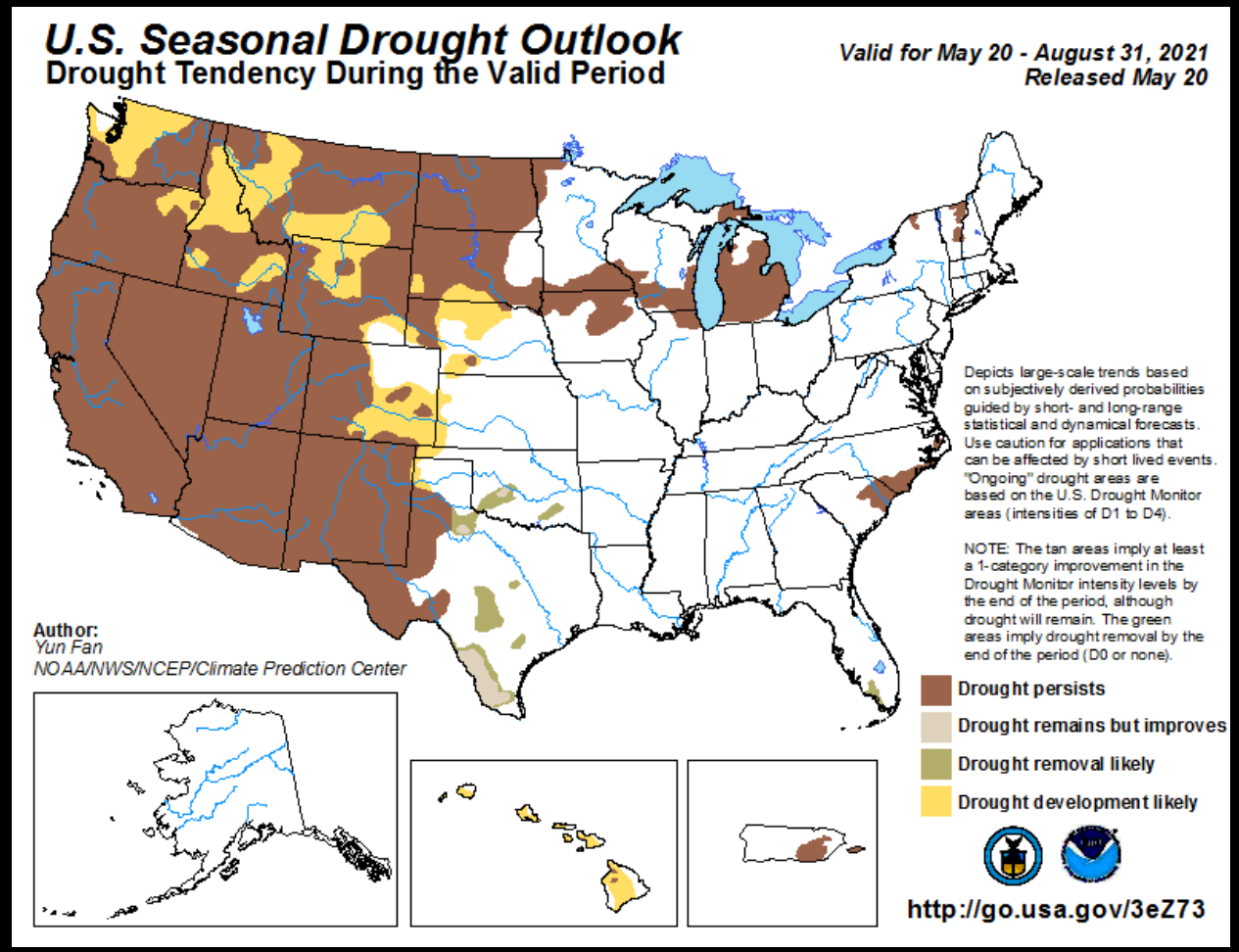
- Monthly updated outlooks forecasting above or below normal significant fire potential for the next 4 months
- Combines current situation with forecast weather and climate
  - Detailed discussion of total fire environment
- Great for planning
  - Severity requests
  - Resource allocation and extensions



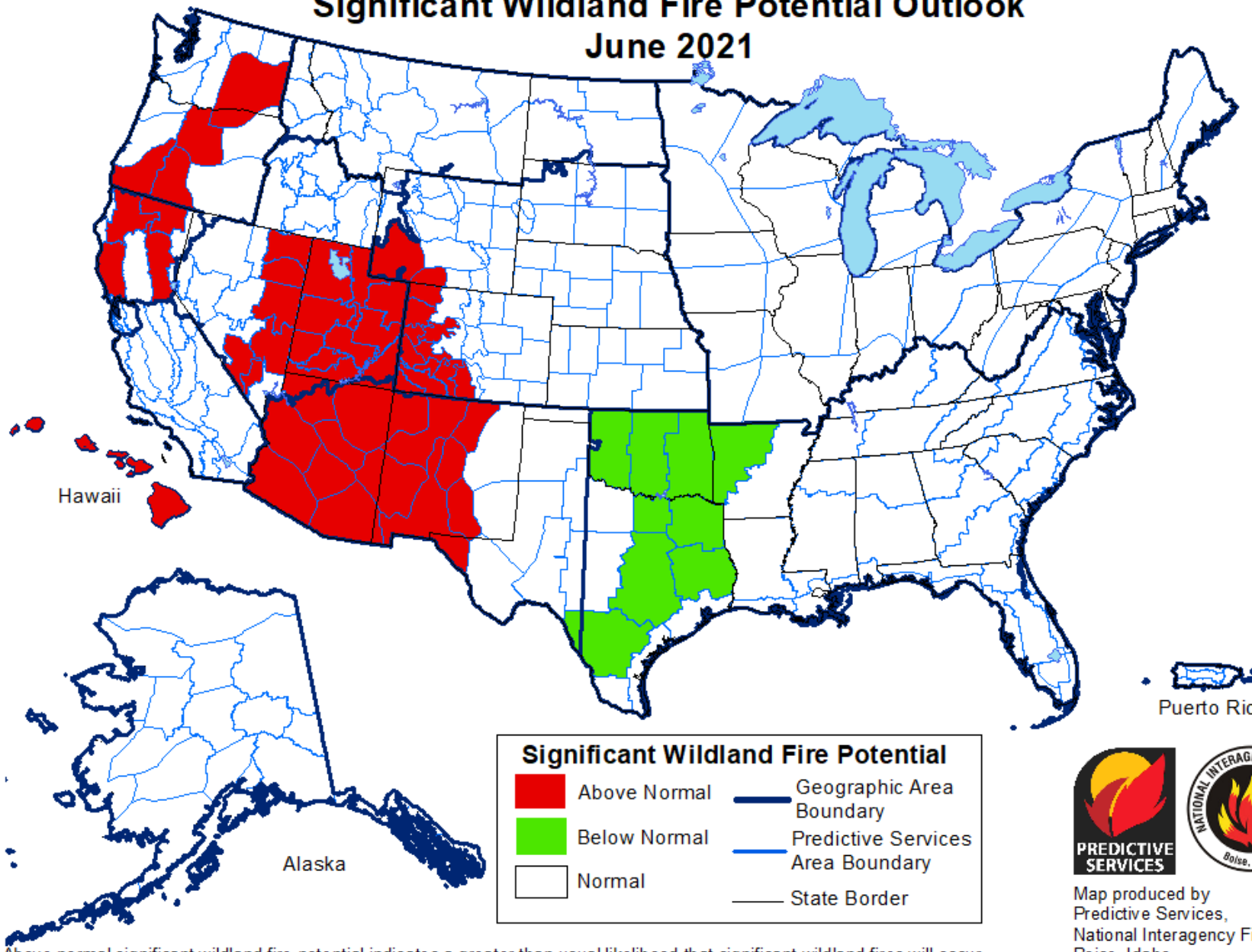
https://www.predictiveservices.nifc.gov/outlooks/outlooks.htm

Drought Conditions and Outlook





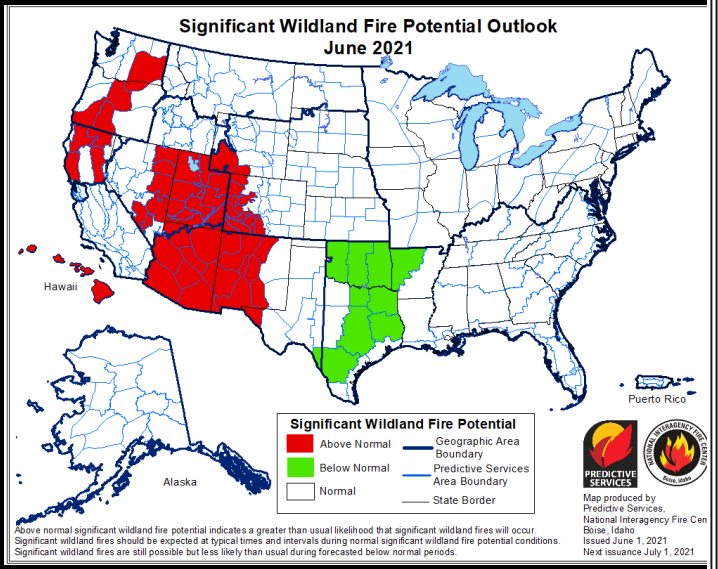
Significant Wildland Fire Potential Outlook
June 2021



Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur.
Significant wildland fires should be expected at typical times and intervals during normal significant wildland fire potential conditions.
Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.

Map produced by
Predictive Services,
National Interagency Fire Center
Boise, Idaho
Issued June 1, 2021
Next issuance July 1, 2021

June


Significant Wildland Fire Potential Outlook
June 2021
Hawaii
Puerto Rico
Alaska
Significant Wildland Fire Potential
Above Normal
Below Normal
Normal
Geographic Area Boundary
Predictive Services Area Boundary
State Border
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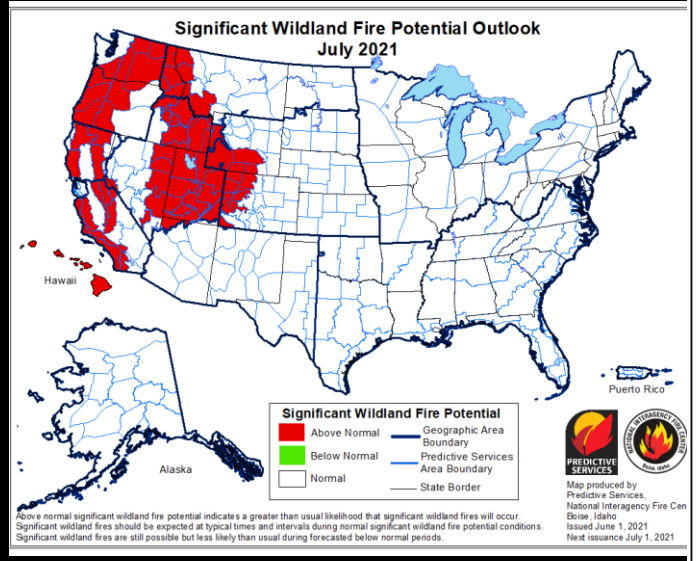
July



Significant Wildland Fire Potential Outlook
August 2021

Hawaii

Alaska

Puerto Rico

Significant Wildland Fire Potential

- Above Normal
- Below Normal
- Normal
- Geographic Area Boundary
- Predictive Services Area Boundary
- State Border

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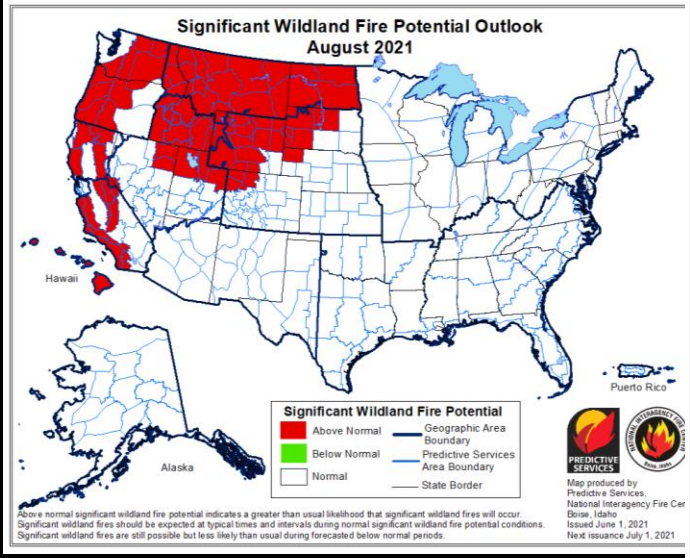
August



Significant Wildland Fire Potential Outlook
September 2021

Hawaii

Alaska

Puerto Rico

Significant Wildland Fire Potential

- Above Normal
- Below Normal
- Normal
- Geographic Area Boundary
- Predictive Services Area Boundary
- State Border

PREDICTIVE SERVICES

NATIONAL INTERAGENCY FIRE CENTER
Boise, Idaho

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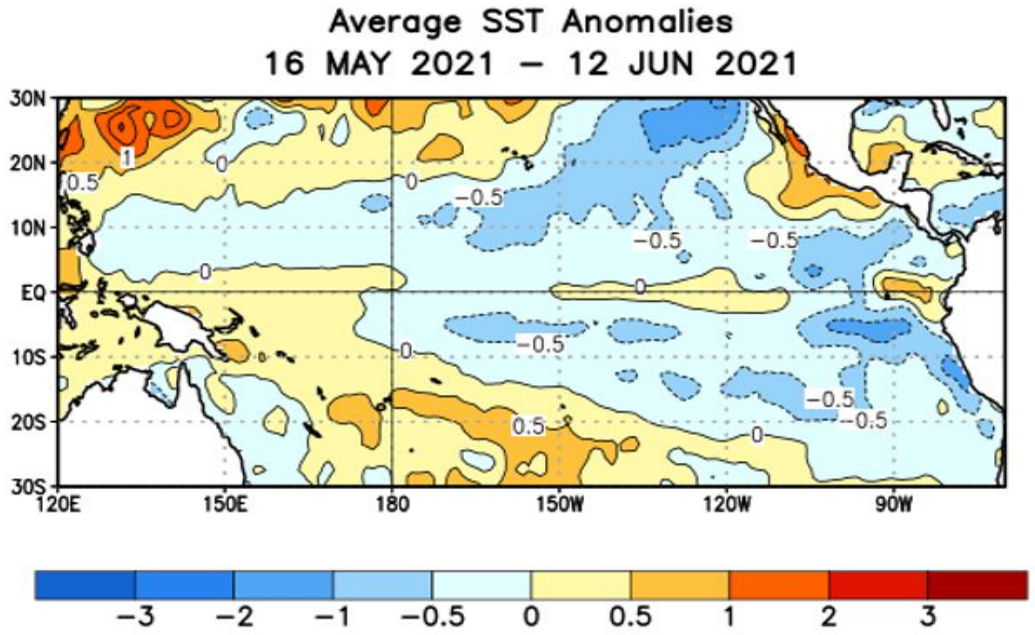
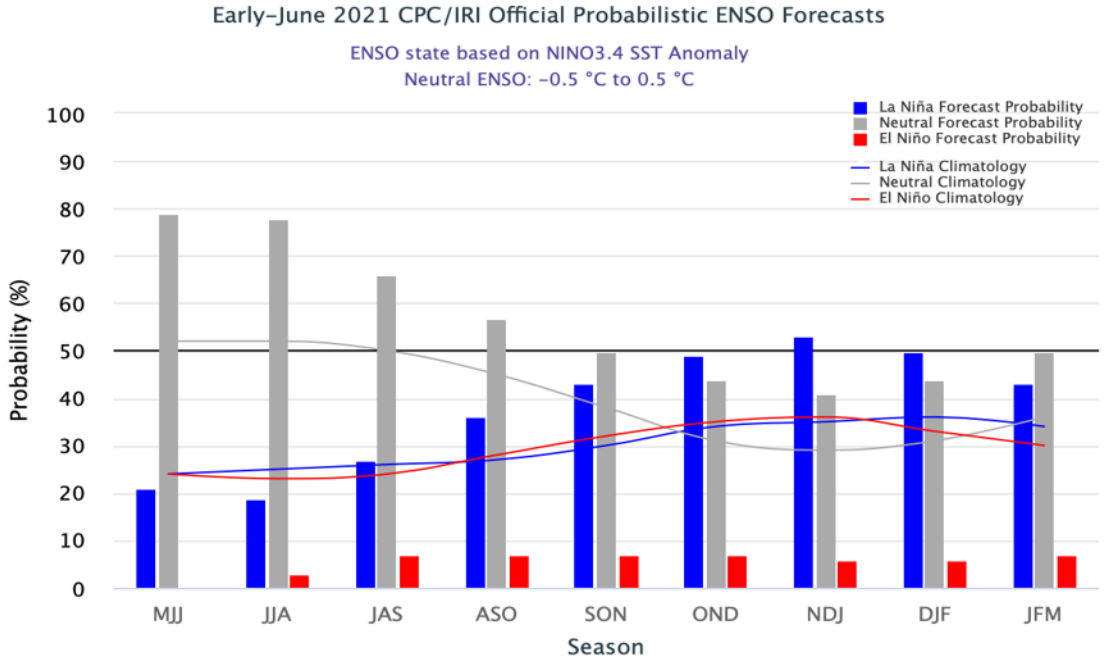
Summary

- More than half of the West in extreme or exceptional drought with nearly 90% of the West in drought
- Much of the western US is forecast to have above normal significant fire potential at some point this summer
- Fuel dryness about 2-4 weeks ahead of schedule in many places
- Potential is there, but as we saw last year, critical fire weather necessary to realize potential

Sea Surface Temperatures and ENSO



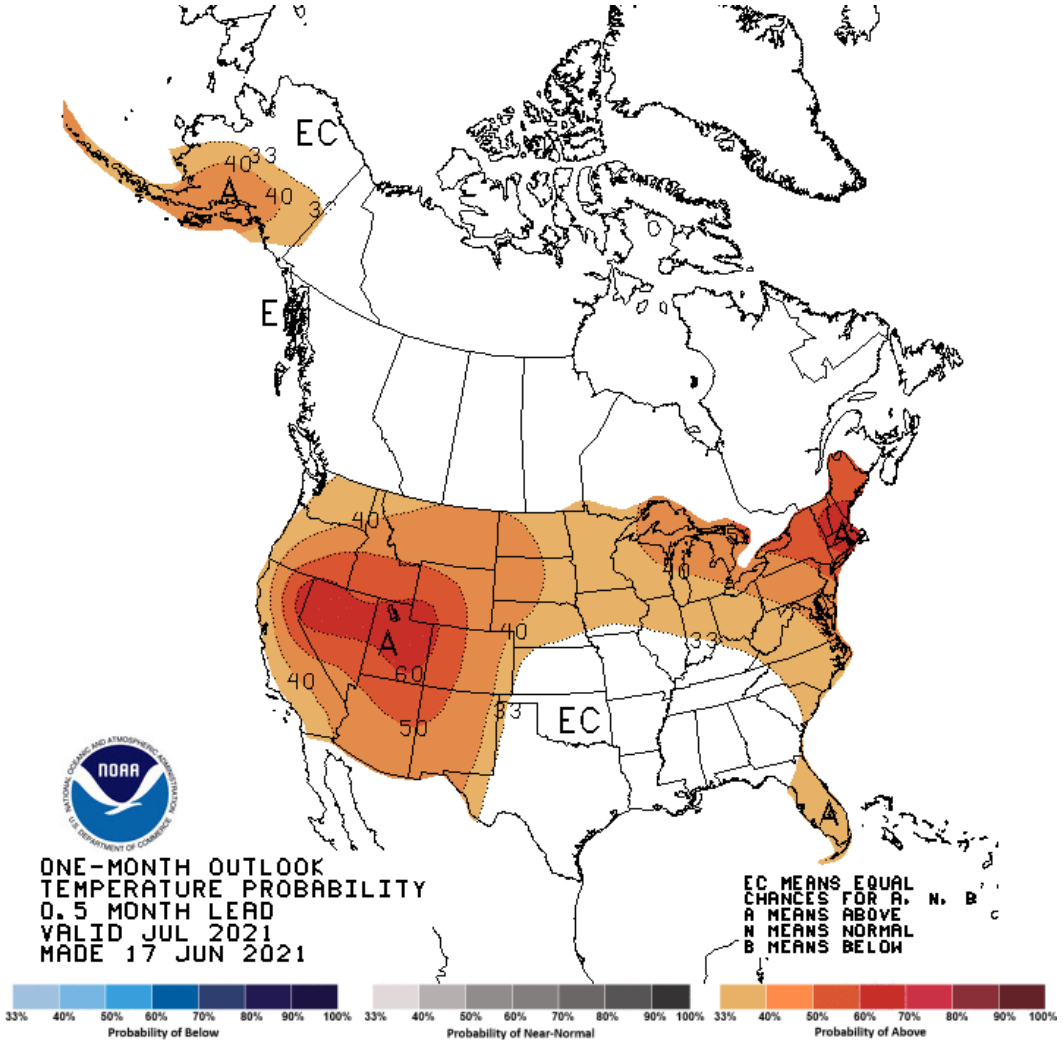


- Sea surface temperatures
  - ENSO-neutral conditions are present.
  - Equatorial sea surface temperatures (SSTs) are near average across most of the Pacific Ocean

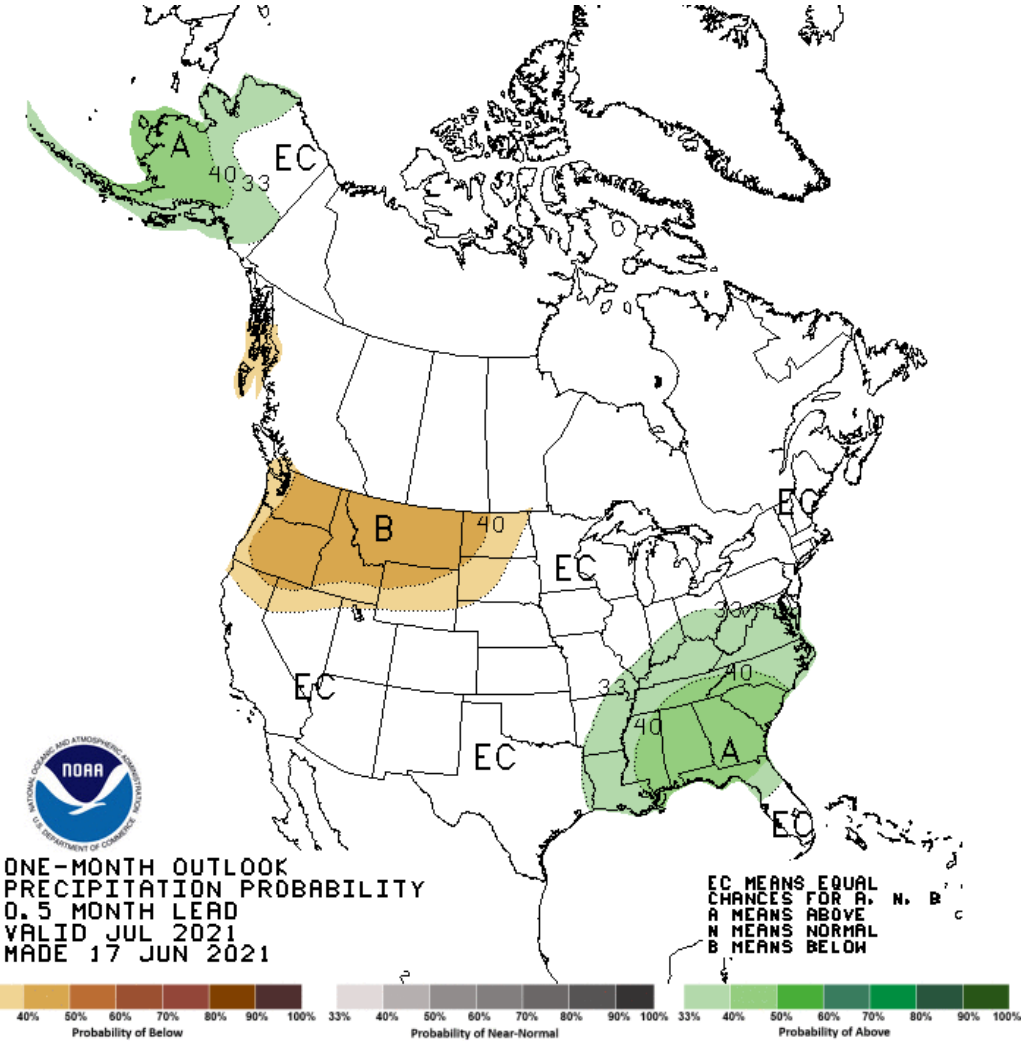
- ENSO forecast
  - ENSO-neutral is favored through the Northern Hemisphere summer (78% chance for the June-August season) and fall (50% chance for the September-November season).
  - El Niño is the least likely scenario through the upcoming winter

Monthly Forecast (July)

July Average Temperature Probability

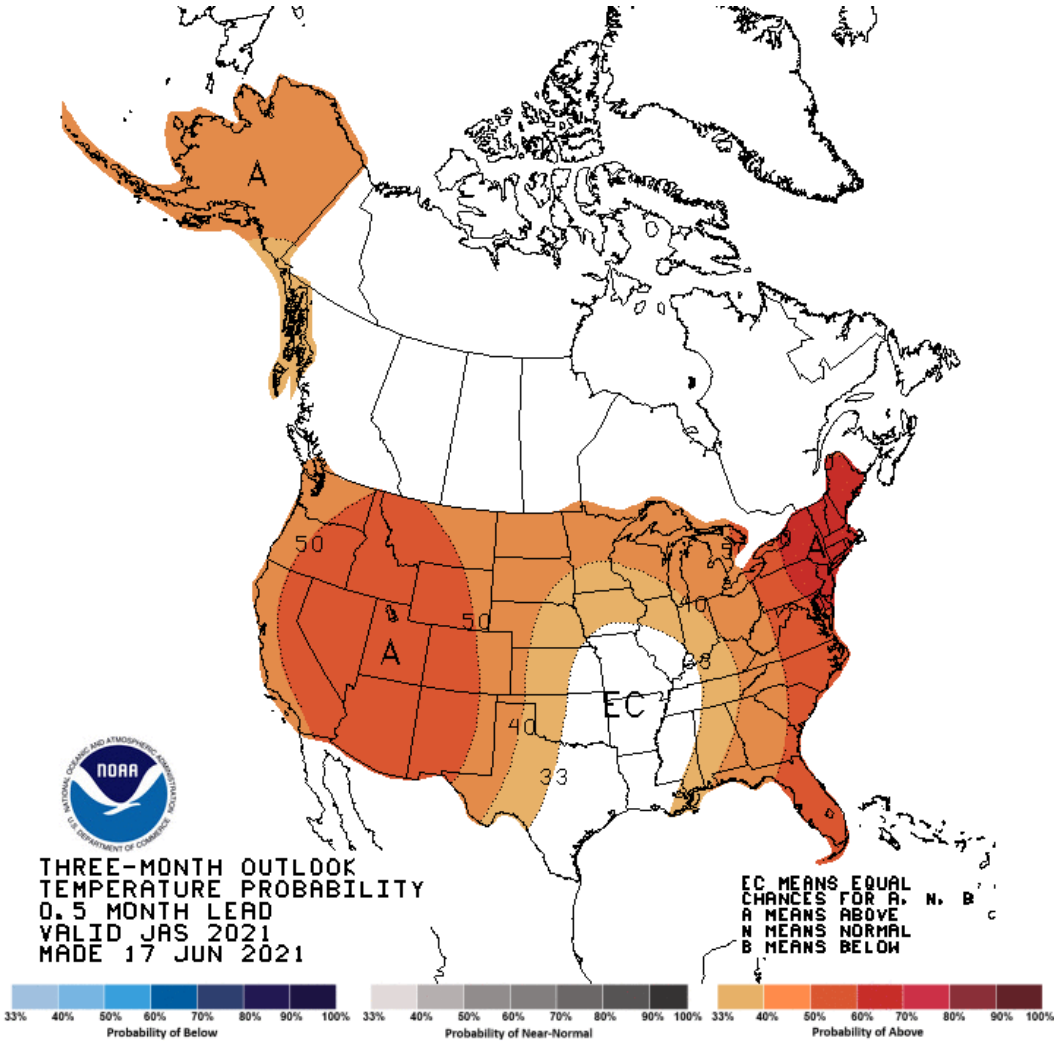


July Total Precipitation Probability

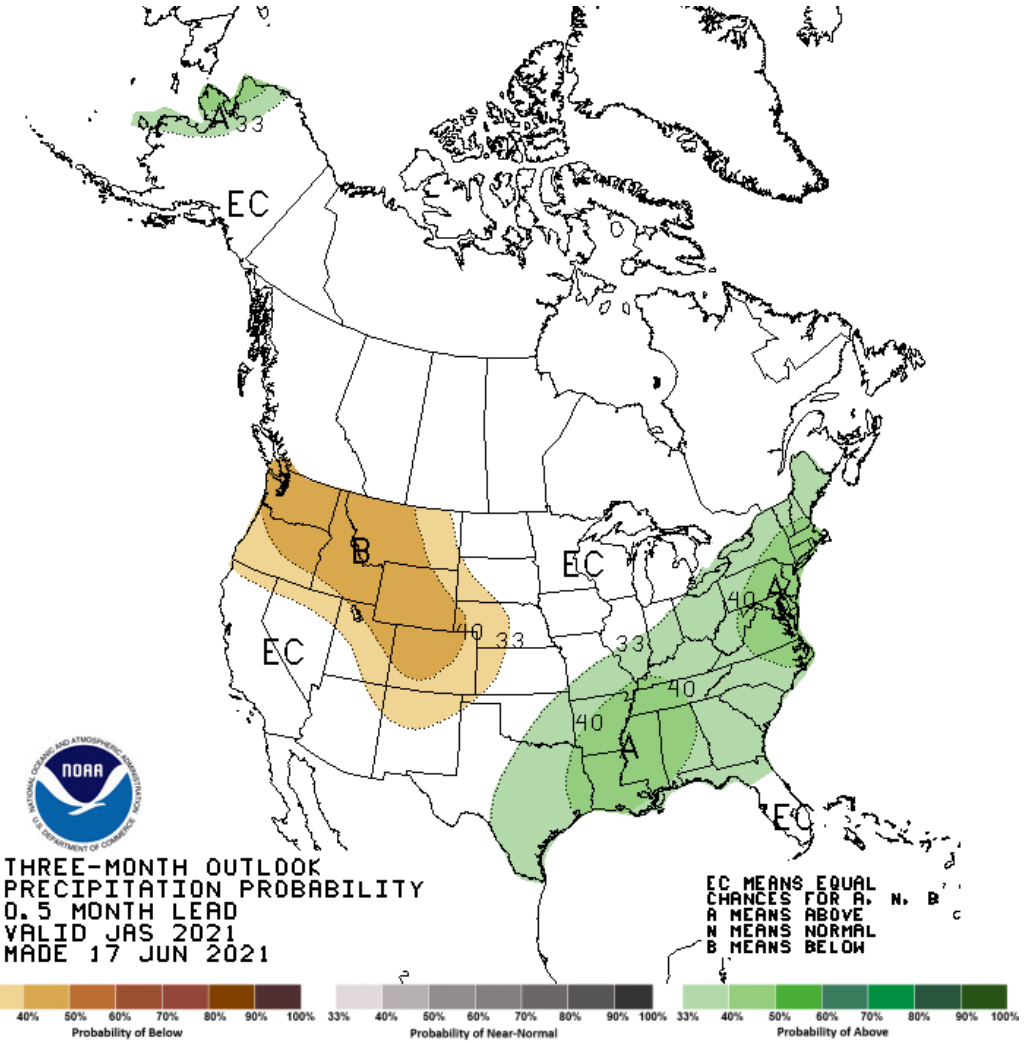


Three-month Forecast (Jul, Aug, Sep)

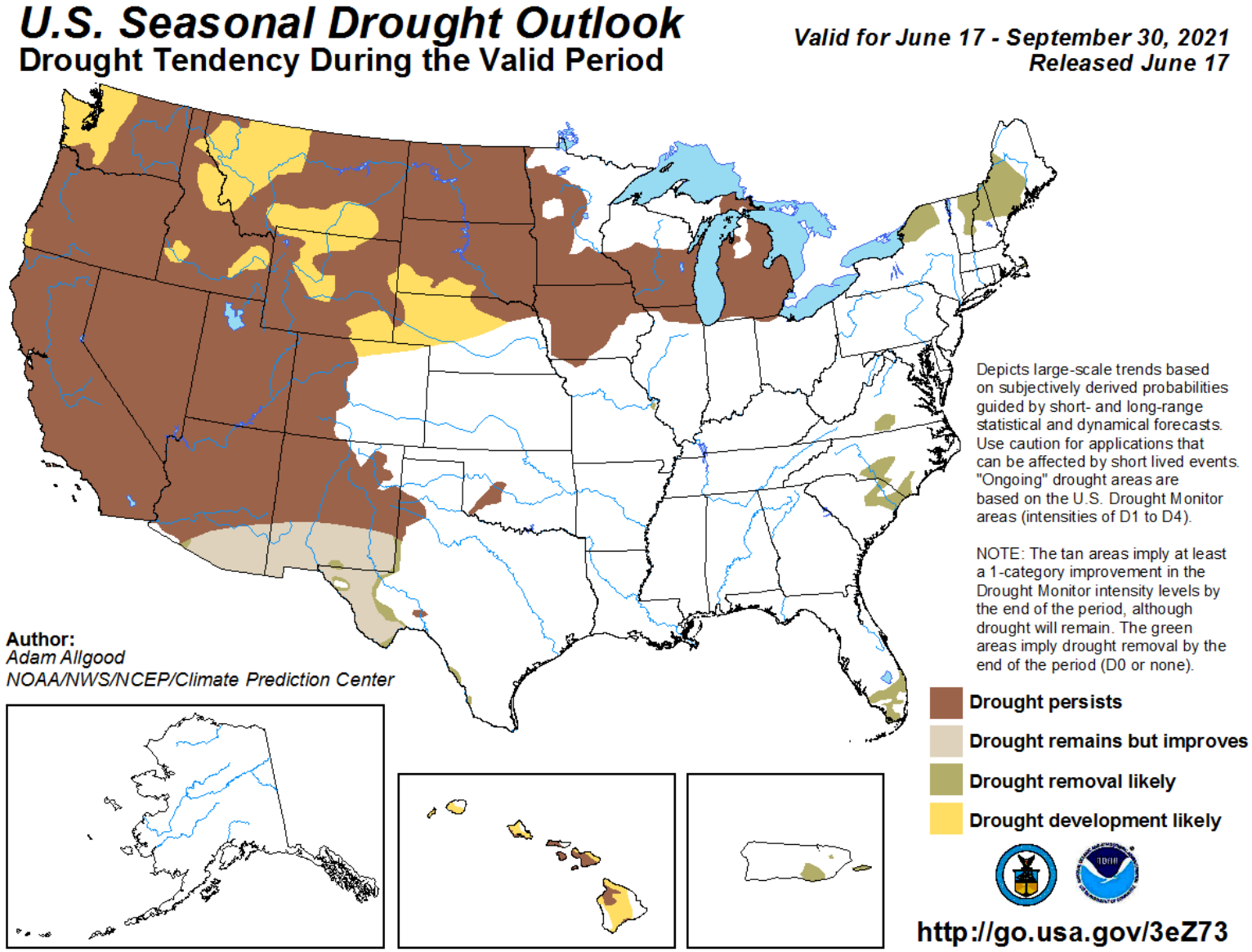
Jul-Aug-Sep Average Temperature Probability



Jul-Aug-Sep Total Precipitation Probability



U.S. Drought Outlook



For More Information

TODAY'S PRESENTATION:

- http://www.ncdc.noaa.gov/sotc/briefings

NOAA's National Centers for Environmental Information: www.ncdc.noaa.gov

- Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- Dates for upcoming reports: http://www.ncdc.noaa.gov/monitoring-references/dyk/monthly-releases

NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov

Great Basin Coordination Center: https://gacc.nifc.gov/gbcc/

U.S. Drought Monitor: www.drought.gov

Climate Portal: www.climate.gov

NOAA Media Contacts: john.jones-bateman@noaa.gov, 301-713-9604 (NOAA/NESDIS PAO)